

We agree entirely with the two letters that precede this article. With reference to the "destruction of *fungi* or *smut* by the heat in the mash tun," we beg to say that we have taken the temperature of the worts hundreds of times as they were running off, and never found them less than 150° to 162°; the heat of the whole mash—malt and hot water mixed—was, 20 minutes after the mashing was finished and the tun covered, about 158° to 160°, a very curious rise in temperature being always observable at that time.

The Poultry-Yard.

The Breeding Season—Selection of the breeding stock—Proper number to breed from—How to obtain fertile Eggs—Treatment of the sitting hens.

(A. G. GILBERT.)

The season for mating and breeding is now upon us. Success or failure in results depends upon the way in which the fowls are mated. The aim of the farmer should be to better his stock of layers, by careful mating, every year. The usual slipshod method of allowing a certain number of male birds to run with the hens, regardless of results, is a positive hindrance to progress. How so? In this way. That without care in selecting the best to breed from, no uniform excellence in laying, or flesh making, can be obtained.

SELECT THE BEST TO BREED FROM

The farmer should make it a point to pick out from his stock the best shaped and most prolific layers. If they are yearling hens they should be mated with a two year old cock. If two-year-old fowls, a vigorous yearling male should be used. If possible, the male bird should come from a family of great layers. Having picked out his best layers and mated them with a carefully selected cock, or cockerel, he is likely to go on from good to something better. As like is said to beget like, the carefully selected male and females are not likely to give unsatisfactory offspring. The farmer will have a greater number of fertile eggs and the chickens will make rapid growth and vigorous development. A little thought given to the subject of proper mating; a little exertion made to secure this desirable consummation; a little more intelligence and trouble at the right time, will add many more dollars to the purse in the fall of the year, when the April and early May cockerels should weigh four, or, five pounds each and the pullets making ready to soon add to the egg yield. With careful treatment and regular feeding the cockerels should make development at the rate of one pound to one pound and two ounces per month. This weight may not be attained the first month or six weeks, but the gain in later months will make the figures quoted, about right.

THE PROPER NUMBER TO BREED FROM.

It has been stated in previous pages the proper number of hens and the different breeds to mate up, but it may be admissible to repeat the figures on the present occasion.

Light Brahmas, 1 male, 7 or 9 females.
Buff Cochins, 1 do 5 or 7 do
Plymouth Rocks, 1 do 9 or 11 do
Wyandottes, 1 do do do
White, or, Black
Minors, 1 do 11 do
Leghorns, 1 do 11 do
Andalusians, 1 do 11 do
Javas, 1 do 7 or 9 do

If the laying stock are confined to limited quarters, a lesser number of females will do. Or, if an early mating is required for early fertile eggs for incubator use, half the number of hens will be answer. In the latter case and indeed in all cases the rule should be to keep the male bird away from the hens until the breeding pen is made up.

On the other hand where the farmers, hens have an early run out, the full number of hens mentioned, and even a larger number, in the case of the Mediterranean class may be allowed. Much depends upon circumstances governing different cases.

HOW TO OBTAIN FERTILE EGGS.

Having picked out the best in shape and size and the best layers in your flock, the next aim should be to have them put into the pen in the proper condition. Care should be taken not to have the Plymouth Rocks, Brahmas and Wyandottes too fat. These breeds put on fat very easily and eggs from overfat hens are not likely to be fertile, nor are the chicks, if any are hatched, likely to be strong upon their legs. If the hens selected have been laying well all the winter, it will be well to give them a rest and, if at all possible, a run out, before the eggs from them are saved for hatching purposes. All eggs hatch better after the hens have had a run out, after the long term of artificial existence during the winter season. The writer has however, had some exceptional experiences in the case of 11 White Plymouth pullets and a cockerel and 4 White Java hens and a yearling cock. In both cases, although the hens laid well all the winter and were mated early and their eggs set early, the percentage of fertile eggs was large and the chickens grew vigorously. All this no doubt was owing to the constitutional vigour of the strains the fowls came from. Cat green bone is an excellent ration for feeding to breeding stock. The hens will eat no more of it than is good for them, and it contains shell making as well as egg making material.

KEEP THE SITTERS IN A QUIET PLACE.

The sitting hens should be kept in a place by themselves. Close by them should be a trough containing food, a dust-bath and water to drink. There will be no inducement then for the sitters to go any distance to find food and drink. Canadian corn is the best food for early sitters, because it fills the crop quickly and early eggs will not stand much exposure to cold. Seven minutes is quite long enough for the hen to be away from the nest. If you have all she wants handy, she will not be much longer off the eggs. When the weather is warmer mixed grain is the best food. But the object of the farmer should be to have early chicks, for they mean early cockerels for market, and early pullets for layers. The treatment of the newly hatched chickens and the proper way to cause their rapid and vigorous growth, will receive consideration next month.

FARMERS' SYNDICATE

OF THE
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Fertilizers and agricultural implements of every kind. Send in your order at once for feed cutters. Farm products of all kind sold for our members. Informations of all kind given to members.

MARK LANE: Prices current; Jan. 13th
Wheat, per 504 lbs.; British s. s.
White..... 28 33
Red..... 27 31
London flour per 280 lbs..... 27 —
Barley, foreign..... 16 44
Malting English..... 30 38
Grinding..... 16 21
Oats, English per 8 bushels... 15 29
White pease..... 32 33

FOREIGN.

Wheat—Manitoba..... 27 29
Canadian white pease..... 27 28
London Cattle market, Oct. 14th:
Milk cows, per head. £15 to £23

BEASTS.

Scotch..... 4 6
Herefords per stone of 8 lbs.. 4 4
Welsh (runt) " " " 4 2
Shorthorns " " " 4 2
Fat cows " " " 3 6

SHEEP.

Small Downs " " " 5 8
Half brods " " " 5 6
Calves " " " 5 4
Pigs " " " 3 6

BUTTER.

Fresh, (Finest factory) per doz. lbs..... 14 15
English Dairy-butter, fresh... 10 13
Irish (creamery)..... 115
Danish..... 112

CHEESE.

Cheshire per 112 lbs..... 74 80
Cheddar, finest..... 56 66

BACON.

Irish..... 49
Canadian..... 36
Hams, Danish..... 54
American..... 48
Irish, small..... 100
HAY, per load of 2016 lbs..... 86
Prime meadow..... 90
STRAW, per load 1296 lbs..... 40
Best..... 40
Hops from 40s. to 105s. per 112 lbs..... 40 110

Prices of Pigs at Calne.

Present prices for prime pigs, in lots of not less than 10, on rail within 100 miles of Calne:—

Prime Stores.	Thickness of fat in any part of the back.	Price per sc.
60 to 10 lbs to 90 to 120 lbs.	2 1/2 inches and under	7s 6d
Under 100 lbs.	Not exceeding 2 1/2 in.	6s 6d
Under 110 to 120 lbs.	Not exceeding 2 1/2 in.	6s 6d
Under 120 to 130 lbs.	Not exceeding 3 in.	6s 6d

Any pigs outside these limits of their value.
Half-track—2 pigs. Whole track—25 pigs.
CHAS. & THOS. HARRIS, & Co.,
Limited, Calne, Wilts, Eng. (1)

(1) Messrs. Harris & Co. do not seem to want only 1/2 of an inch on the back as Mr. Laing does!—Ed.

Household-Matters.

Women Farmers—Recipes—
Expectation of life.

In these days of progress nothing is surprising, so we are quite prepared to hear of women out West who have taken up, and become quite successful in farming.

It is not every woman who can, or has the strength of mind or body to do this. It requires a strong will, with a determination to overcome all difficulties which may beset her path, and what she cannot do herself she must be able to show people how it is to be done, and not only show but superintend the work.

To give an order is one thing, to see it carried out is the secret of success, especially where one has to deal with an uneducated mind for there are some parts of farm work that must be done by the labouring man, and herein lies often the secret of women's power over man. A man will give an order and expect to have it carried out, without staying to see it done, and really this ought to be all that is necessary, but bitter experience often nowadays shows how hopeless it is unless the mind is educated to the work.

I well remember superintending the planting of some trees once, and dear me! how grudgingly every spadeful of earth was dug out, so as to get plenty of space and depth for the tree to thrive in, it really was too funny for anything seeing that the man was paid by the hour, but womanlike I stuck to my post and got the trees planted as I wished. There are men who have the power of command so great that fear of being detected will cause their orders to be strictly carried out, and of course a man working on his own property would be likely to do his very best.

One has only to look at the large Institutions carried on by women to show what they can do. Where can one find things more economically carried on in than the Sisterhoods entirely conducted by women? They leave nothing to chance; but where work is being done, there, close by, is one to see all orders faithfully carried out.

Now, a woman to carry on a farm successfully must have either have been brought up on one, or have the happy faculty of picking up the knowledge required for doing so. Farming with plenty of money, where experience can be bought, is often a dead failure, a shrewd woman will think twice about it. I did hear of two ladies, with plenty of money to back them, who for want of some fresh excitement, having travelled all over the continent, spoke of buying a farm, as it would be so nice to have chickens, pigs &c., to see round them: that was their idea of farming. There is no doubt about its being a very delightful occupation, to watch the bursting of the plants through the soil, the excitement of picking the weeds out from choking the tender bud, then, again picking out the weak so as to give the vigorous plants plenty of room to develop to their natural size, these are some of the delights of farm life.

The wonder is that some more young girls do not try to start a market garden, there are so many things they could grow that pay well, as they would readily be given a bit of land to try on and in time might see their way to owning a farm. It would be far preferable to rushing to town; often finding themselves exhausted and having to return home with impaired digestive organs through unwholesome